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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/661,280	09/12/2003	Gerhard Heinemann	HEINEMANN-3	7618

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HENRY M FEIEREISEN, LLC
350 FIFTH AVENUE
SUITE 4714
NEW YORK, NY 10118

EXAMINER	
CHERY, MARDOCHEE	

ART UNIT	PAPER NUMBER
2188	

DATE MAILED: 11/16/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/661,280	HEINEMANN, GERHARD	
	Examiner	Art Unit	
	Mardochee Chery	2188	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *12 September 2003*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-13* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-13* is/are rejected.

7)☒ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☒ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *12 September 2003* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Information Disclosure Statement

1. The information disclosure statement filed 9/12/03 fails to comply with 37 CFR 1.98(a)(3) because it does not include a concise explanation of the relevance, as it is presently understood by the individual designated in 37 CFR 1.56(c) most knowledgeable about the content of the information, of each patent listed that is not in the English language. It has been placed in the application file, but the information referred to therein has not been considered.

Specification

2. The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

Claim Objections

3. Claims 2, 5 and 7 are objected to because of the following informalities:

a. In claim 2, at the beginning of line 5, "function" should be changed to –functions— since "several functions" was previously recited.

b. In claims 5 and 7, "The controller of claim 1, and further comprising" should be changed to --The controller of claim 1 further comprises--.

Appropriate correction is required.

Claim Rejections - 35 USC § 112

4. The following is a quotation of the first paragraph of 35 U.S.C. 112:

> The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

5. Claims 1-4, 6, and 8-13 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. The terms "real-time function", "real-time basic function", and "real-time additional function" must be clearly and fully described in the specification, in light of applicant's invention, as to enable a person of ordinary skill in the art to make and use the same.

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

7. Claims 1, 7 and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tello (2003/0018892) in view of Melvin (5,754,424).

As per claim 1, Tello discloses a controller, in particular a drive controller, comprising: a first functional block for at least one permanently installed controller function [par. 1]; and a second functional block for at least one dynamically loadable controller function wherein the second functional block can be dynamically loaded or dynamically overwritten with a real-time function during the operation of the controller [pars. 60, 137, 206].

However, Tello does not specifically teach dynamically loadable controller function as required by the claim.

Melvin discloses dynamically loadable controller function [col.21, line 59 to col. 22, 29] to control the variables of a system (col.1, lines 10-15).

Since the technology for implementing a controller with dynamically loadable controller function was well known as evidenced by Melvin, an artisan would have been motivated to implement this feature in the system of Tello since this would have enabled controlling the variables of a system. Thus, it would have been obvious to one of ordinary skill in the art at the time of invention by Applicant to modify the system of Tello to include dynamically loadable controller function because this would have facilitated controlling the variables of the system (col. 1, lines 10-15) as taught by Melvin.

As per claim 7, Tello discloses a device for monitoring memory location access.

As per claim 10, the rationale in the rejection of claim 1 is herein incorporated.

8. Claims 2 and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tello (2003/0018892) in view of Melvin (5,754,424) as applied to claim 1 above, and further in view of Sampsell (6,256,714).

As per claim 2, the rationale in the rejection of claim 1 is herein incorporated. However, Tello and Melvin do not specifically teach the real-time additional function is dynamically loaded or dynamically overwritten or started or executed in the second functional block without interrupting the real-time basic function as required by the claim.

Sampsell discloses the real-time additional function is dynamically loaded or dynamically overwritten or started or executed in the second functional block without interrupting the real-time basic function [col.3, lines 51-60 and col.4, lines 22-45] to efficiently execute a plurality of programs (col.1, lines 9-11).

Since the technology for implementing a controller with the real-time additional function dynamically loaded or dynamically overwritten or started or executed in the second functional block without interrupting the real-time basic function was well known as evidenced by Sampsell, an artisan would have been motivated to implement this feature in the system of Tello and Melvin in order to efficiently execute a plurality of programs. Thus, it would have been obvious to one of ordinary skill in the art at the time of invention by Applicant to modify the system of Tello and Melvin to include the real-time additional function being dynamically loaded or dynamically overwritten or started or executed in the second functional block without interrupting the real-time basic

function because this would have allowed efficient execution of a plurality of programs (col.1, lines 9-11) as taught by Sampsell.

As per claim 11, the rationale in the rejection of claim 2 is herein incorporated.

9. Claims 3-6 and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tello (2003/0018892) in view of Melvin (5,754,424) as applied to claims 1 and 10 above, and further in view of Birzer (2002/0082720).

As per claim 3, Tello and Melvin disclose the claimed invention as discussed above in the previous paragraphs.

However, Tello and Melvin do not specifically teach a bus link, wherein the real-time additional function is loaded via the bus link from a management automation system as required by the claim.

Birzer discloses a bus link, wherein the real-time additional function is loaded via the bus link from a management automation system [par. 7; page 5, right column, lines 39-44] in order to regulate the rotation speed and/or position (par. 1).

Since the technology for implementing a controller with a bus link, wherein the real-time additional function is loaded via the bus link from a management automation system was well known as evidenced by Birzer, an artisan would have been motivated to implement this feature in the system of Tello and Melvin in order to regulate the rotation speed and/or position. Thus, it would have been obvious to one of ordinary skill

in the art at the time of invention by Applicant to modify the system of Tello and Melvin to include a bus link, wherein the real-time additional function is loaded via the bus link from a management automation system because this would have regulated the rotation speed and/or position (par.1) as taught by Birzer.

As per claim 4, Birzer discloses the real-time additional function is loaded via an Internet connection [par. 18].

As per claim 5, Birzer discloses a device for runtime monitoring [par. 55].

As per claim 6, Melvin discloses the runtime monitoring device determines a computing time required by the real-time additional function, and wherein the real-time additional function is terminated if the required computing time exceeds a predefined reference time [col.21, line 59 to col.22, line 10].

As per claim 12, the rationale in the rejection of claim 6 is herein incorporated.

10. Claims 8 and 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tello (2003/0018892) in view of Melvin (5,754,424) as applied to claim 1 above, and further in view of Stripf (6,263,487).

As per claim 8, Stripf discloses the device for monitoring memory location access monitors memory addresses accessed by the real-time additional function, and wherein the real-time additional function is terminated if these memory addresses do not correspond to predefined reference memory addresses that are reserved for the real-time additional functions [Fig.3].

As per claim 9, Stripf discloses the device for monitoring memory location access administers a memory region with access rights for both the real-time basic functions and the real-time additional function, and wherein copies of variables of the real-time basic functions are stored at this memory region [Fig.4].

Conclusion

11. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Stripf	6,263,487
Martin	5,412,791
Barford	6,691,249

12. When responding to the office action, Applicant is advised to clearly point out the patentable novelty that he or she thinks the claims present in view of the state of the art disclosed by references cited or the objections made. He or she must also show how the amendments avoid such references or objections. See 37 C.F.R. 1.111(c).

13. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mardochee Chery whose telephone number is (571) 272-4246. The examiner can normally be reached on 8:30A-5:00P.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Manonama Padmanabhan can be reached on (571) 272-4210. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

November 3, 2005

Kevin L. Ellis
Primary Examiner

Mardochee Chery
Examiner
AU: 2188